

Homework Assignment #3: The Economics of Sports 229

Due: Friday, February 20

This assignment may be turned in as a group assignment. Up to a maximum of 5 names may be placed on the final paper turned in on Tuesday. For this assignment, *and this assignment only*, each student is not required to turn in an independently written assignment. You are allowed to choose your own group of up to 5 people or work independently. Each person in the group will receive the same grade on the assignment.

1. Choose a sports league other than MLB. (Some possible choices are the NFL, NHL, NBA, MLS, EPL, Serie A, La Liga, the Bundesliga, or numerous college conferences in any sport.)

Find the final standings for two or more recent years.

- a. Describe your data. Tell me how you are going to deal with anomalies in the data, e.g. expansion teams, promotion/relegation, number of games played, etc. Turn in a copy of your data with the assignment
- b. Calculate the within season (intra-season) competitive balance of your league using the standard deviation method of win percentage method.
- c. Compare the competitive balance of your league to a recent season of MLB. Is your league more or less competitive than MLB? You can download the stats in Excel format for the 2008 and 2007 MLB seasons from the class website.
(<http://www.holycross.edu/departments/economics/vmatheso/econ229.htm>)

Make sure you account for differences in the season length when comparing the leagues.

- d. Calculate the between season (inter-season) competitive balance of your league using a measure of your choice. (Possible measures include the n-firm concentration ratio for championships or playoff appearances, HHI for championships or playoff appearances, inter-season correlation, and inter-season rank correlation.)
- e. Using the same measure you used in part d., compare your league to MLB. Is your league more or less competitive than MLB or is it not possible to tell with the measure you used?

If you need to collect other data on inter-season competitive balance for MLB, historical data is available at www.mlb.com or <http://mlb.mlb.com/mlb/history/index.jsp>.

2. Graph Lorenz Curves for team 2008 payrolls in MLB and the NFL. The statistics are available in the same file as above. Based on the Lorenz curves, which league has a more equitable distribution of salaries across teams? (Hint: it is best to put both curves on the same graph.)
3. Using the 2008 MLB data, is there a relationship between payroll and success? Use an appropriate statistic to measure the relationship.